

REMARKS

Applicants have amended Claims 1, 6, 8 and 9. Support for the amendment can be found at page 4, lines 1-6. Applicants respectfully submit that it is for the inventor to decide what bounds of protection he will seek and he has the right to retreat to otherwise patentable subject matter because only part of what was originally claimed is patentable. In re Johnson, 194 USPQ 187, 195-96 (CCPA 1977), accordingly Applicants respectfully submit that no new matter has been added by the present amendment.

Applicants have added new Claims 16-19. Support for the amendment can be found at page 3, lines 8-16. Applicants respectfully submit that no new matter has been added by the present amendment.

I. Claims Rejections - 35 U.S.C. § 112

The Office Action rejects Claim 15 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Office Action states that "said styrene/butadiene copolymer," lacks antecedent basis in Claim 1, accordingly Applicants have amended Claim 15 to depend upon Claim 7. Therefore, Applicants request withdrawal from this ground of rejection.

II. Rejection under 35 U.S.C. §112

The Office Action rejects Claims 1, 2, 4-10 and 13-15 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. According to the Office Action, "applicants have stated in response to the prior art rejections in view of JP 57-212239 and JP 5-17630 that component A) does not correspond to a liquid diene rubber, and this statement indicates that the invention is different from what is defined in the claims because component A), as claimed, is clearly met by liquid diene rubber components."

Applicants respectfully traverse this ground of rejection. In response to the previous Office Action's rejection of Claims 1-10 under 35 U.S.C. §102(b) as being anticipated by Dammann, et al. (U.S. Patent No. 5,232,531) or JP 57-212239 or JP 5-17630 Applicants stated:

JP 57-212239 discloses a mixture of the following components: a rubber consisting of (i) 70 – 95 parts of solid rubber and (ii) 30 – 5 parts of liquid rubber; (B) a masked isocyanate; and (C) Novolac.

In contrast, the presently claimed invention does not contain either JP 57-212239's component (C), or component (A)(ii), a liquid rubber. Furthermore, component (A)(i), does not disclose or suggest the presently claimed rubber gel.

JP 5-17630 discloses a mixture containing a powdered rubber, a rubber solution containing, in an inert solvent, of a hydroxyl-modified rubber and a polyfunctional isocyanate. The Applicants respectfully submit that JP 5-17630 does not disclose or suggest the presently claimed uncrosslinked rubber and a rubber gel. Furthermore, JP 5-17630 requires a hydroxyl-terminated liquid rubber, which is clearly not claimed in the present invention.

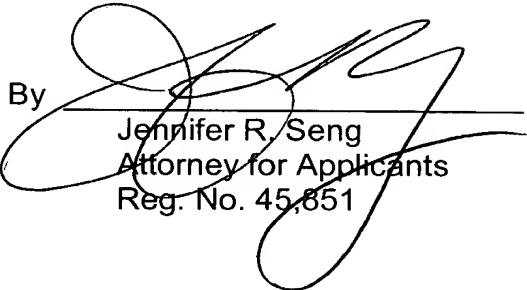
For clarification purposes, Applicants resubmit that JP 572112239 teaches a rubber composition comprising a 70-95:5-30 blend of solid diene rubber and **functional group containing liquid rubber**. Similarly, as previously argued, JP 5017630 teaches a powdered rubber composition which is prepared by adding 100-250 pts. wt. polyisocyanate to 100 pts. wt. **hydroxyl terminated liquid diene rubber**. And as also stated in Applicant's previously filed Response regarding components A and B of the present invention, "neither (A) nor (B) contain functional groups that will react with an isocyanate." Accordingly, Applicants resubmit that for the reason previously stated, JP 572112239 and JP 5017630 fail to teach a composition according the present invention. And, Applicants respectfully submit that their previously filed arguments did not imply that component A) of the present invention does not correspond to a liquid rubber.

Applicants further submit that the neither JP 57-212239 or JP 5-17630 teach or suggest claimed component B), i.e., a crosslinked rubber particle having particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.%. Therefore, Applicants respectfully resubmit that JP 57-212239 and JP 5-17630 fail to anticipate the present invention.

Therefore, Applicants respectfully request this ground of rejection be removed.

Respectfully submitted,

By



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The Claims have been amended as follows:

1. (Twice Amended) Rubber mixtures comprising uncrosslinked, double-bond-containing rubbers (A), crosslinked rubber particles (B) and multifunctional isocyanates (C), wherein the amount of component (B) in the mixture is from 1 to 150 parts by weight and the amount of multifunctional isocyanates (C) is from 1 to 100 parts by weight, in each case based on 100 parts by weight (phr) of the rubber component (A) and wherein said crosslinked rubber particles (B) have particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.%, and wherein component (A) is non-functionalized to react with an isocyanate.

6. (Twice Amended) Rubber mixtures according to Claim 1, wherein said uncrosslinked, double-bond-containing rubbers (A) are selected from the group consisting of natural rubber, styrene/butadiene rubber, polybutadiene rubber, nitrile rubber, butyl rubber, brominated isobutylene/isoprene copolymers having bromine contents of from 0.1 to 10 wt.% based on 100 wt.% of said brominated isobutylene/isoprene copolymer, chlorinated isobutylene/isoprene copolymers having chlorine contents of from 0.1 to 10 wt.% based on 100 wt.% of said chlorinated isobutylene/isoprene copolymer, hydrogenated or partially hydrogenated nitrile rubber, styrene/butadiene/acrylonitrile rubber, polychloroprene, epoxidized natural rubber or mixtures thereof, carboxylated nitrile rubbers and carboxylated styrene/butadiene copolymers, and wherein component (A) is non-functionalized to react with an isocyanate.

8. (Twice Amended) A rubber vulcanate comprising rubber mixtures, which comprise uncrosslinked, double-bond-containing rubbers (A), crosslinked rubber particles (B) and multifunctional isocyanates (C), wherein the amount of component (B) in the mixture is from 1 to 150 parts by weight and the amount of multifunctional isocyanates (C) is from 1 to 100 parts by weight, in each case based on 100 parts by weight (phr) of the rubber component (A) and wherein said crosslinked rubber

particles (B) have particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.%, and wherein component (A) is non-functionalized to react with an isocyanate.

9. (Twice Amended) Molded rubber bodies comprising rubber mixtures, which comprise uncrosslinked, double-bond-containing rubbers (A), crosslinked rubber particles (B) and multifunctional isocyanates (C), wherein the amount of component (B) in the mixture is from 1 to 150 parts by weight and the amount of multifunctional isocyanates (C) is from 1 to 100 parts by weight, in each case based on 100 parts by weight (phr) of the rubber component (A) and wherein said crosslinked rubber particles (B) have particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.%, and wherein component (A) is non-functionalized to react with an isocyanate.

16. (Twice Amended) A rubber mixture according to ~~Claim 4~~Claim 7, wherein said styrene/butadiene copolymers have styrene contents of from 5 to 50 wt.% based on 100 wt.% of said styrene/butadiene copolymer.

As explicitly set forth in **37 C.F.R. Section 1.21(c)(1)(ii), last sentence**, a **marked up version** does **not** have to be supplied for an **added** claim **or** a **cancelled** claim as it is sufficient to state that a particular claim has been added, or cancelled, and this has been so stated in the Amendment.

In particular, in this case, Claims 16-19 have been newly added.